

GREAT LAKES GOVERNORS PRIORITIES

*Indicators and
Information*



*Water Use
and Diversion*



*Areas of
Concern/Sediments*



Polluted Runoff



Coastal Health



*Sustainable
Development*



Wisconsin and other Great Lakes states and provinces have made great strides in the last 30 years in restoring Lake Michigan and protecting Lake Superior and their tributaries, part of the world's largest source of fresh surface water.

Perhaps the most telling sign of this progress is that the Milwaukee River, once an open sewer for its namesake city, now supports more than 30 fish species, including walleye and lake sturgeon.

However, serious challenges remain, and new ones are emerging to the lakes. Wisconsin and its neighboring states and provinces are recommitting themselves to the task. Governor Jim Doyle and his colleagues in December signed on to a regional collaboration process with the federal government, the Great Lakes cities and tribal governments to develop a restoration strategy for the Great Lakes by the end of 2005, focusing on nine key restoration and protection priorities.

Toxics



*Invasive
Species*



Habitat



Visit the Wisconsin DNR web site for more information:
dnr.wi.gov/org/water/greatlakes/



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Our Great Lakes Future... Happening Today

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The legacy of John Muir, Aldo Leopold, Gaylord Nelson and others is evident in our forests, beautiful lakes, wild rivers and especially our Great Lakes. Lake Superior and Lake Michigan are Wisconsin's part of an international treasure that provides fishing enjoyment, boating and swimming opportunities for residents and visitors alike. Our Great Lakes are also critical economic resources that power industry, create a thriving shipping industry, and anchor a vibrant tourism economy. However, the lakes' beautiful vistas hide serious problems that Wisconsin must contribute to solving.

Our challenge is to carry on the work of Muir, Leopold and Nelson, and seize the tremendous opportunity now before us to protect and improve the Great Lakes through collaborative efforts across the region. Hundreds of participants have helped develop initial drafts of a comprehensive national action plan; later this summer, all Wisconsin citizens and other Great Lakes residents will have an opportunity to review and comment on the draft proposals. We will submit a final plan to the U.S. Congress in December 2005, seeking funding for a Great Lakes Restoration initiative.

As co-chair of the Council of Great Lakes Governors, I want to thank you for taking the time to learn more about the challenges facing the Great Lakes, important efforts underway to address these challenges, and how you can help spur action in Congress and here at home in Wisconsin. I encourage you to join me in creating an action plan that will inspire and enlist people from across the region, and will build the public and political support necessary to protect and restore these world class natural resources.

Sincerely,

Jim Doyle

Governor Jim Doyle

Highlights of Recent Wisconsin Great Lakes Projects

Perpetual protection from polluted runoff

A Brown County creek degraded by years of polluted runoff from farms and urban areas is getting some much-needed protection. A Wisconsin Great Lakes Protection Fund grant enabled the county's Land Conservation Department to secure commitments from willing land-owners that cut the soil, fertilizer, manure and other pollutants carried into the stream. Participating land-owners signed contracts agreeing to maintain for perpetuity a 35 foot wide strip, or "buffer," next to Baird Creek where they won't plant crops, plow or engage in any agricultural activities. The contracts protect 3.5 miles of stream forever. Shaped and seeded with grass using Wisconsin Land and Water Grant funds, the buffer strips reduce the amount of phosphorus entering the stream every year by 69 pounds, reduce nitrogen by 38 pounds and soil by 71 tons. Much more work needs to be accomplished if water quality is to improve significantly on Baird Creek, but it's important progress.



Stream Buffer

Keeping Lake Superior water superior

A new state-of-the art wastewater treatment plant constructed near Bayfield will remove virtually all pollutants from wastewater before releasing it to Lake Superior, the most pristine of the Great Lakes. The "zero discharge" plant, the first of its kind in Wisconsin to exceed state and federal standards, is a joint project funded by grants from DNR and the U.S. Army Corps of Engineers, a low interest loan from DNR's Clean Water Fund, as well as by Bayfield and Pikes Bay sanitary sewer customers.

Shoring up fish habitat

Eroding stream bank bluffs annually sent tons of soil into North Fish Creek, burying spawning areas for trout and salmon. A collaborative effort to prevent more erosion and re-establish spawning habitat is now paying off for the creek's fish and anglers.



Eroding Bluffs

The University of Wisconsin-Madison Civil Engineering Department installed submerged structures (vanes) in the middle of the stream to deflect the current away from the banks. The U.S. Geological Survey, in cooperation with UW, the Wisconsin Department of Natural Resources, Bayfield County, and the U.S. Fish and Wildlife Service, have been monitoring the project and found that the structures are working to prevent erosion, even during and after floods. DNR staff are working with others to install vanes at other tributaries to Lake Superior with similar bluff erosion problems.

Cleaning up contaminants from rivers and fish



Dredging on the Fox River

Historic wastewater discharges from industry left a legacy of chemical contaminants buried in the mud at the bottom of several Great Lakes harbors or tributaries. After decades of investigations and study on how best to clean up these contaminated sites, work began in earnest on a number of sites.

PCB clean up began on the Fox and Sheboygan Rivers in 2004, ending nearly a quarter-century of investigations and studies. Clean up of petroleum laden sediment is also under way in Newton Creek and Hog Island Inlet of Superior Bay.

Hydraulic dredging of PCB-contaminated sediment started in the Lower Fox River at Little Lake Butte des Morts. Over the next decade as much as 7.25 million cubic yards of contaminated sediment from a 39-mile stretch of the Lower Fox River will be removed. On the Sheboygan River, the clean up of a 14-mile stretch of the river, as well as soil and groundwater is expected to take seven years. In the Lake Superior Basin, clean up on Newton Creek is completed and 50,000 cubic yards of contaminated sediment are slated for removal from Hog Island Inlet in 2005.

The portions of Lakes Michigan and Superior that lie within Wisconsin's boundaries add nearly 6.5 million acres of water to Wisconsin. Lake Superior is the biggest of the Great Lakes with a surface area of 31,700 square miles, and a volume of 2,900 cubic miles. It is also the deepest and coldest, and water in the lake remains there for 191 years, based on the rate of water flowing out of it. In comparison, it only takes six years for water in Lake Erie to be replaced by incoming water.

Lake Michigan is the second largest of the five Great Lakes, with a surface area of 22,300 square miles and a volume of 1,190 cubic miles.

Seeking solutions to a smelly problem

Stringy, smelly algae has been washing up on Great Lakes beaches in recent years in increasing quantities, concerning waterfront property owners, swimmers, government and tourism officials and others with a stake in the health and beauty of the lakes.

Investigations by the DNR, University of Wisconsin – Milwaukee WATER Institute, and others around the Great Lakes have pointed to a complex relationship of light penetration, zebra mussels and phosphorus causing this problem. While studies continue to help us to better understand this problem, actions to reduce phosphorus will start to limit the nutrient available for algae growth.



Cladophora (algae) on Lake Michigan